AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0001	8 MAY 2002		

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
US ARMY ENGINEER DISTRICT, FORT WORTH ATTN: CESWF-CT (RM 2A19) PO BOX 17300 FORT WORTH, TX 76102-0300			

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*	(X)	9A. AMENDMENT OF SOLICIATION NO.
	☒	DACA63-02-R-0013
		9B. DATED *(SEE ITEM 11)* 26 APRIL 2002
	☐	10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED *(SEE ITEM 11)*
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a)By completing items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (*Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The Request for Proposal for Design-Build Harris heights Family Housing, Fort Sam Houston, Texas, is amended as follows:

See Continuation Sheets.

NOTE: The Receipt of Proposal date and time remain "11 June 2002, at 4 p.m. local time," as previously announced.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED

Item 14. Continued.

CHANGES TO BIDDING REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

1. Replace the following Section with the attached new Section of the same number and title, bearing the notation “ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-02-R-0013.”

SECTION 00102 PRE-PROPOSAL CONFERENCE/SITE VISITATION

CHANGES TO SPECIFICATIONS

2. New Sections.- Add the following accompanying new section bearing the notation “ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-02-R-0013 and add the section number and title to the Project Table of Contents:"

SECTION 01011 SPECIAL PROJECT REQUIREMENTS

3. Replacement Sections – Replace the following section with the accompanying new section of the same number and title, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-02-R-0013:"

SECTION 01770 CONTRACT CLOSEOUT

CHANGES TO ATTACHMENTS

4. New Attachment.- Add the following accompanying new attachment bearing the notation “ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-02-R-0013 and add to the Project Table of Contents:"

ATTACHMENT 14 COMPOSITE SOIL SAMPLE ANALYSIS RESULT

END OF AMENDMENT

SECTION 00102

PRE-PROPOSAL CONFERENCE/SITE VISITATION
AMENDMENT NO. 0001

PART 1 GENERAL

1.1 PRE-PROPOSAL CONFERENCE/SITE VISITATION

Invitation is extended to all prospective offerors to attend a pre-proposal conference and site visitation for the Design-Build Harris Heights Family Housing at Fort Sam Houston, Texas. The pre-proposal conference has been scheduled for 1:00 pm to 4:00 pm on Thursday, 16 May 2002 at the NCO Club, Bexar Ballroom, at Fort Sam Houston, San Antonio, Texas. A site visit will immediately follow the conference.

At the pre-proposal conference, Government representatives will highlight specific design/build contract requirements not typically encountered in conventional construction procurements. The objective is to provide an information exchange between potential offerors and the Government to avoid the possibility of misinterpretation of the contract requirements. Accordingly, it is highly recommended that prospective offerors attend the pre-proposal conference and, in the interest of making the conference more meaningful, prospective offerors are urged to present any written questions concerning the project proposal documents, bidding, design and construction requirements or other related matters prior to the conference to the address shown in Block 7 of Standard Form 1442 contained in Section 00010, "Solicitation, Offer, And Award (Standard Form 1442)," ATTN: Ms. Barbara Zimmer. Questions may also be sent via facsimile transmission prior to the conference to Ms. Barbara Zimmer at (817) 886-6407. Written questions may be submitted at the beginning of the conference and oral questions may be submitted from the floor, but answers will be limited to the time available. Written queries need not be signed if anonymity is desired. Answers, interpretations and decisions made at the conference will not become official unless and until verified by an amendment to the contract issued prior to the receipt of proposals.

Following the conference and pursuant to Contract Clause "FAR 52.236-3, Site Investigation and Conditions Affecting the Work," and the Site Visit Clause in Section 00100 INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS, prospective offerors will be permitted to inspect the site where services are to be performed and to satisfy themselves as to all general and local conditions that may affect the cost of performance of the contract to the extent such information is reasonably obtainable. In no event will a failure to inspect the site constitute grounds for withdrawal of a proposal after receipt of proposal or for a claim after award of the contract.

Potential offerors are requested to advise as to their intent to attend the pre-proposal conference and site visitation by facsimile transmission to Ms. Barbara Zimmer at (817) 886-6407 at their earliest convenience.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

SECTION 01011

SPECIAL PROJECT REQUIREMENTS
04/2001
AMENDMENT NO. 0001

PART 1 GENERAL

1.1 SUMMARY

This Section covers project requirements, such as state regulatory requirements, that are not normally covered in the technical sections in Divisions 02 through 16.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Customer Service Inspection Certification; G.

The Contractor shall obtain a "Appendix D. Customer Service Inspection" for the water supply in accordance with the Texas Natural Resource Conservation Commission (TNRCC). The TNRCC rule covering this requirement is Texas Code Title 30. Part I. Chapter 290. Subchapter D (see paragraph 290.46(j)). In accordance with this code, a certificate shall be completed and signed. The competed certificate shall be submitted to the Contracting Officer for review and final approval. A copy of the rule and sample of the form (appendix D) can be obtained from the TNRCC's home page at the web site: www.tnrcc.state.tx.us or http://info.sos.state.tx.us/fids/30_0290_0047-22.html. The form is also attached to the end of this Section.

Sample Backflow Prevention Assembly Test & Maint. Report; G.

Certification of proper operation of backflow preventers shall be accomplished in accordance with state regulations by an individual certified by the state to perform such tests. If no state requirement exists, the Contractor shall have the manufacturer's representative test the device to ensure the unit is properly installed and performing as intended.

The Contractor shall obtain a "Appendix F. Sample Backflow Prevention Assembly Test and Maintenance Report" for the water supply in accordance with the Texas Natural Resource Conservation Commission (TNRCC). The TNRCC rule covering this requirement is Texas Code Title 30. Part I. Chapter 290. Subchapter F (see paragraph 290.47(f)). In accordance with this code, a certificate shall be completed and signed. The competed certificate shall be submitted to the Contracting Officer for review and final

approval. The report is also attached to the end of this Section.

A copy of the rule and sample of the form (appendix D) can be obtained from the TNRCC's home page at the web site: www.tnrcc.state.tx.us or http://info.sos.state.tx.us/fids/30_0290_0047-23.html. The form is also attached to the end of this Section.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

3.1 FORMS

3.1.1 Appendix D. Customer Service Inspection Certificate

Figure: 30 TAC §290.47(d)

Name of PWS _____
PWS I.D.# _____
Location of Service _____

Reason for Inspection: New construction. [ ]
Existing service where contaminant hazards are suspected [ ]
Major renovation or expansion of distribution facilities [ ]

I _____, upon inspection of the private water distribution facilities connected to the aforementioned public water supply do hereby certify that, to the best of my knowledge:

	Compliance	Non-Compliance
(1) No direct connection between the public drinking water supply and a potential source of contamination exists. Potential sources of contamination are isolated from the public water system by an air gap or an appropriate backflow prevention assembly in accordance with Commission regulations.	[ ]	[ ]
(2) No cross-connection between the public drinking water supply and a private water system exists. Where an actual air gap is not maintained between the public water supply and a private water supply, an approved reduced pressure-zone backflow prevention assembly is properly installed and a service agreement exists for annual inspection and testing by a certified backflow prevention assembly tester.	[ ]	[ ]
(3) No connection exists which would allow the return of water used for condensing, cooling or industrial processes back to the public water supply.	[ ]	[ ]
(4) No pipe or pipe fitting which contains more than 8.0% lead exists in private water distribution facilities installed on or after July 1, 1988.	[ ]	[ ]
(5) No solder or flux which contains more than 0.2% lead exists in private water distribution facilities installed on or after July 1, 1988.	[ ]	[ ]

I further certify that the following materials were used in the installation of the private water distribution facilities:

Service lines	Lead [ ]	Copper [ ]	PVC [ ]	Other [ ]
Solder	Lead [ ]	Lead Free [ ]	Solvent Weld [ ]	Other [ ]

I recognize that this document shall become a permanent record of the aforementioned Public Water System and that I am legally responsible for the validity of the information I have provided.

Remarks:

_____
Signature of Inspector

_____
Registration Number

_____
Type of Registration

_____
Title

_____
Date

http://info.sos.state.tx.us/fids/30_0290_0047-22.html

Figure: 30 TAC §290.47(f)

Appendix F: Sample Backflow Prevention Assembly Test and Maintenance Report

The following form must be completed for each assembly tested. A signed and dated original must be submitted to the public water supplier for record keeping purposes:

BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT

NAME OF PWS: _____
PWS I.D. # _____
MAILING ADDRESS _____
CONTACT PERSON _____
LOCATION OF SERVICE: _____

The backflow prevention assembly detailed below has been tested and maintained as required by TNRCC regulations and is certified to be operating within acceptable parameters.

TYPE OF ASSEMBLY

[ ] Reduced Pressure Principal
[ ] Double Check Valve
[ ] Pressure Vacuum Breaker
[ ] Reduced Pressure Principle-Detector
[ ] Double Check-Detector
[ ] Spill-Resistant Pressure Vaccum Breaker

Manufacturer_____ Size _____
Model Number_____ Located At _____
Serial Number_____

Is the assembly installed in accordance with manufacturer recommendations and/or local codes? ____

Figure: 30 TAC §290.47(f)

	Reduced Pressure Principle Assembly			Pressure Vacuum Breaker	
	Double Check Valve Assembly				
	1st Check	2nd Check	Relief Valve	Air Inlet	Check Valve
Initial Test	Held at ____ psid Closed Tight [ ] Leaked [ ]	Held at ____ psid Closed Tight [ ] Leaked [ ]	Opened at ___ psid Did not open [ ]	Opened at ___ psid Did not open [ ]	Held at ____ psid Leaked [ ]
Repairs and Materials Used					
Test After Repair	Held at ____ psid Closed Tight [ ] Leaked [ ]	Held at ____ psid Closed Tight [ ] Leaked [ ]	Opened at ___ psid	Opened at ___ psid	Held at ____ psid

Test gauge used: Make/Model_____ SN:_____ Calibration Date:_____
Remarks:_____
The above is certified to be true at the time of testing.

Firm Name _____ Certified Tester _____
Firm Address _____ Cert. Tester No. _____ Date_____
Firm Phone #_____

* TEST RECORDS MUST BE KEPT FOR AT LEAST THREE YEARS
** USE ONLY MANUFACTURER'S REPLACEMENT PARTS

SECTION 01770

CONTRACT CLOSEOUT
04/2001
AMENDMENT NO. 0001

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

MILITARY SPECIFICATIONS (MIL)

MIL-M-9868E	Microfilming of Engineering Data, 35mm, Requirements For

TRI-SERVICE CADD/GIS TECHNOLOGY CENTER (TSC)

TSC-01	A/E/C CADD Standard Manual (Current Release as of Contract Award date)

U.S. ARMY CORPS OF ENGINEERS (COE)

COE-02	ARCHITECTURAL AND ENGINEERING INSTRUCTIONS MANUAL (SWD-AEIM), Southwestern Division (Current issue as of Contract Award date)

1.2 PAYMENT

Contract closeout activities such as, but not limited to, operation and maintenance manuals, record drawings, warranty requirements, equipment warranty identification tags, and inventories, real property maintenance records, payrolls, and shop drawing submittals, are subsidiary activities of the contract work; separate payment will not be made for any activity unless otherwise specified. Final contract payment will not be made until completion and approval of all contract closeout activities.

1.3 HVAC TESTING

The HVAC Testing that the Contractor schedules after substantial completion pursuant to paragraph entitled "Testing of Heating and Air-Conditioning Systems" of Section 01000 DESIGN AND CONSTRUCTION SCHEDULE has a value to the Government of 10 percent of the value of the equipment to be tested. The Contractor shall reserve that amount to be paid on any equipment that will require testing after substantial completion pursuant to the above referenced specification paragraph.

1.4 OPERATION AND MAINTENANCE MANUALS

The Contractor shall be responsible for the preparation, coordination, execution and submittal of all operation and maintenance manuals (O & M Manuals), including spare parts lists, special tools, inventories of equipment manuals and maintenance instructions, and shall conduct all

training for operating and service personnel. Operation and maintenance manuals shall cover all system installations provided in this contract and shall be in sufficient detail to facilitate normal maintenance and troubleshooting by persons with minimum experience with the installed equipment.

1.4.1 Submittal Requirements

All of the above listed items required in the technical specifications shall be submitted to the Contracting Officer not less than 90 days prior to the scheduled contract completion date. Fully developed and approved operation and maintenance manuals shall be provided 30 days prior to scheduling training for operating and service personnel. The Contractor shall coordinate the content of each instruction period required in the technical specifications with the Contracting Officer's Representative prior to the actual start of the training period.

1.4.1.1 Video taping of Training for Operating and Service Personnel

Each instruction or training period as discussed above, shall be video taped in VHS FORMAT by the Contractor. The taping shall include the entire session(s). The original video tape(s) shall be labeled and turned over to the Contracting Officer. The video camera and tapes utilized by the Contractor, shall be of a quality to enable clear and understandable playbacks of the recorded events.

1.4.1.2 Draft O & M Manuals

On those systems where complete and comprehensive operation and maintenance manuals cannot be fully developed until the system(s) is checked, tested, and/or balanced, and the checking, testing, and/or balancing has not been done when submittals are required, a proposed draft of those system manual(s) shall be submitted. 10 percent of the each subsequent scheduled progress payment will be retained until the complete O & M Manuals submittal package have been submitted and approved. Submit fully developed O & M Manuals of the drafts for approval after the systems have been checked, tested, and/or balanced.

1.4.1.3 Commencement of Warranty of Construction

Failure to submit all specified O & M manuals, spare parts listings, spare parts, special tools, inventories of installed property, and training video tapes in a timely manner will be considered as delaying substantial completion of the work. Commencement of warranty under the Contract Clause WARRANTY OF CONSTRUCTION will not occur until all these items are delivered and approved by the Contracting Officer, but not earlier than the date of final acceptance of the work by the Government. When the O & M Manuals with drafts are approved they will not constitute a reason for delaying the start of the warranty period.

1.4.2 Government Possession of Work

The Government may take possession of any completed or partially completed work as provided for under Contract Clause entitled "USE AND POSSESSION PRIOR TO COMPLETION." If the installed equipment and/or systems thereto, have not been accepted by the Government due to the Contractor's failure to submit the above specified items, the Contractor shall operate and maintain such plant or system at no additional cost to the Government until such time that the specified items have been received, approved and any

subsequent testing, check-out and/or training has been completed.

1.5 PREPARATION AND SUBMISSION OF OPERATION AND MAINTENANCE MANUALS

This paragraph establishes general requirements for the preparation and submission of equipment operating, maintenance, and repair manuals as called for in the various sections of the specifications. Specific instruction(s) relating to a particular system or piece of equipment shall be incorporated into the manuals in accordance with the applicable technical specification.

1.5.1 General Requirements

Furnish operations and maintenance manuals on CD-ROM disk along with a single hard copy. Documents on the CD-ROM disk shall be in portable document format (.pdf); all printed and graphic documents, drawings, and illustrations shall be legible. Hard copy requirements are specified below.

1.5.1.1 Hard Cover Binders

The manuals shall be permanently bound and have a hard cover. The following identification shall be inscribed on the cover: the words "EQUIPMENT OPERATING, MAINTENANCE, AND REPAIR MANUAL:" and the name, building number, location, and indication of utility or systems covered. Manuals shall be approximately 216 mm by 279 mm (8-1/2 by 11 inches) with large sheets folded in and capable of being easily pulled out for reference. All manuals for a single facility must be similar in appearance.

1.5.1.2 Warning Page

A warning page shall be provided to warn of potential dangers (if they exist), such as high voltage, toxic chemicals, flammable liquids, explosive materials, carcinogens, or high pressures. The warning page shall be placed inside the front cover, in front of the title page.

1.5.1.3 Title Page

The title page shall show the name of the preparing firm (designer or contractor) and the date of publication.

1.5.1.4 Table of Contents

Provide in accordance with standard commercial practice.

1.5.2 Equipment Operating, Maintenance, and Repair Manuals

1.5.2.1 General

Separate manuals shall be provided for each utility system as defined hereinafter. Manuals shall be provided in the number of copies specified in the applicable technical section. Manuals shall include, in separate sections, the following information for each item of equipment:

a. Performance sheets and graphs showing capacity data, efficiencies, electrical characteristics, pressure drops, and flow rates. Marked-up catalogs or catalog pages do not satisfy this requirement. Performance information shall be presented as concisely as possible and contain only data pertaining to equipment actually installed.

b. Catalog cuts showing application information.

c. Installation information showing minimum acceptable requirements.

d. Operation and maintenance requirements. Include adequate illustrative material to identify and locate operating controls, indicating devices and locations of areas or items requiring maintenance.

(1) Describe, in detail, starting and stopping procedures for components, adjustments required to obtain optimum equipment performance, and corrective actions for malfunctions.

(2) Maintenance instructions describing the nature and frequency of routine maintenance and procedures to be followed. Indicate any special tools, materials, and test equipment that may be required.

e. Repair information including diagrams and schematics, guidance for diagnosing problems, and detailed instructions for making repairs. Provide troubleshooting information that includes a statement of the indication or symptom of trouble and the sequential instructions necessary. Include test hookups to determine the cause, special tools and test equipment, and methods for returning the equipment to operating conditions. Information may be in chart form or in tabular format with appropriate headings.

f. Parts lists and names and addresses of closest parts supply agencies.

g. Names and addresses of local manufacturers representatives.

1.5.2.2 Facility Heating Systems

Information shall be provided on the following equipment: Boilers, water treatment, chemical feed pumps and tanks, converters, heat exchangers, pumps, unit heaters, fin-tube radiation, air handling units (both heating only and heating and cooling), and valves (associated with heating systems).

1.5.2.3 Air-Conditioning Systems

Provide information on chillers, packaged air-conditioning equipment, towers, water treatment, chemical feed pumps and tanks, air-cooled condensers, pumps, compressors, air handling units, and valves (associated with air-conditioning systems).

1.5.2.4 Temperature Control and HVAC Distribution Systems

a. Provide the information described for the following equipment:

Valves, fans, air handling units, pumps, boilers, converters, and heat exchangers, chillers, water cooled condensers, cooling towers, and fin-tube radiation.

b. Provide all information described for the following equipment:

Control air compressors, control components (sensors, controllers, adapters, and actuators), and flow measuring equipment.

1.5.2.5 Central Heating Plants

Provide the information described for the following equipment: Boilers,

converters, heat exchangers, pumps, fans, steam traps, pollution control equipment, chemical feed equipment, control systems, fuel handling equipment, de-aerators, tanks (flash, expansion, return water, etc.), water softeners, and valves.

1.5.2.6 District Heating Distribution Systems

Provide the information described for the following equipment: Valves, fans, pumps, converters and heat exchangers, steam traps, tanks (expansion, flash, etc.) and piping systems.

1.5.2.7 Exterior Electrical Systems

Information shall be provided on the following equipment: Power transformers, relays, reclosers, breakers, and capacitor bank controls.

1.5.2.8 Interior Electrical Systems

Information shall be provided on the following equipment: Relays, motor control centers, switchgear, solid state circuit breakers, motor controller, and EPS lighting systems, control systems (wire diagrams and troubleshooting flow chart), and special grounding systems.

1.5.2.9 Energy Management and Control System

The maintenance manual shall include descriptions of maintenance for all equipment, including inspection, periodic preventative maintenance, fault diagnosis, and repair or replacement of defective components.

1.5.2.10 Domestic Water Systems

The identified information shall be provided on the following equipment: Tanks, unit process equipment, pumps, motors, control and monitoring instrumentation, laboratory test equipment, chemical feeders, valves, switching gear, and automatic controls.

1.5.2.11 Wastewater Treatment Systems

The identified information shall be provided on the following equipment: Tanks, unit process equipment, pumps, motors, control and monitoring instrumentation, laboratory test equipment, chemical feeders, valves, scrapers, skimmers, comminutors, blowers, switching gear, and automatic controls.

1.5.2.12 Fire Protection Systems

Information shall be provided on the following equipment: Alarm valves, manual valves, regulators, foam and gas storage tanks, piping materials, sprinkler heads, nozzles, pumps, and pump drivers.

1.5.2.13 Fire Detection Systems

The maintenance manual shall include description of maintenance for all equipment, including inspection, periodic preventive maintenance, fault diagnosis, and repair or replacement of defective components.

1.5.2.14 Plumbing Systems

Information shall be provided on the following equipment: Water heaters,

valves, pressure regulators, backflow preventors, piping materials, and plumbing fixtures.

1.5.2.15 Cathodic Protection Systems

Information shall be provided on the following material and equipment: Rectifiers, meters, anodes, anode backfill, anode lead wire, insulation material and wire size, automatic controls (if any), rheostats, switches, fuses and circuit breakers, type and size of rectifying elements, type of oil in oil-immersed rectifiers, and rating of shunts.

1.5.2.16 Generator Installations

Information shall be provided on the following equipment: Generator sets, automatic transfer panels, governors, exciters, regulators, starting systems, switchgear, and protective devices.

1.5.2.17 Miscellaneous Systems

Information shall be provided on the following: Communication and ADP systems, security and intrusion alarm, elevators, material handling, active solar, photovoltaic, and other similar type special systems not otherwise specified.

1.6 RECORD DRAWINGS

Record drawings shall be a record of the construction as installed and completed by the Contractor. They are a record of all deviations, modifications, or changes from (the accepted 100% construction drawings), however minor, which were incorporated in the work. They include all the information shown on the contract set of drawings, any Contractor-original drawings, all additional work not appearing on the contract drawings, and all changes which are made after final inspection of the contract work.

1.6.1 Contractor-Original Record Drawings

Contractor-original record drawings are those drawings drawn by the Contractor, after acceptance of the 100% design documents and the start of construction, to further explain the Contract documents such as subcontractor submittals for fire protection/detection, communication, and other systems, and accepted Contractor's solutions to problems. Submit these drawings as full-size reproducible sheets and CADD files. CADD files shall conform to the Working CADD file requirements specified in paragraph "Final Record Drawings."

1.6.2 Preliminary Record Drawings

The Contractor shall mark up both a reproducible set and a set of prints to show as-built conditions. These two sets, hereafter called preliminary record drawings, or singly, reproducibles or prints, shall be kept current and available on the jobsite at all times, except as noted below. A member of the Contractor's Quality Control Organization shall be assigned responsibility for the maintenance and currency of the preliminary record drawings. This assignment and any reassignment of duties concerning the maintenance of the record drawings shall be promptly reported to the Contracting Officer's representative for approval. All changes from the contract drawings which are made in the work or additional information which might be uncovered in the course of construction, including uncharted utilities, shall be accurately and neatly recorded as they occur by means

of details and notes. All changes and/or required additions to the preliminary record drawings shall be clearly identified in a contrasting color and which is compatible with reproduction of the preliminary record drawings. Preliminary record drawings shall be updated by Friday of each week. During periods when the reproducibles are being copied and are therefore not available at the jobsite, the Contractor shall continue posting all required data to the prints. The Contractor shall minimize the time that the reproducibles are away from the jobsite and shall update them with all as-built data immediately upon their return. The preliminary record drawings will be jointly inspected for accuracy and completeness by the Contracting Officer's representative and the assigned representative of the Contractor's Quality Control Organization prior to submission of each monthly pay estimate. See paragraph, "Withholding for Preliminary Record Drawings." The record drawings shall show the following information, but not be limited thereto:

a. The location and description of utility lines or other installation of any kind or description known to or found to exist within the construction area. The location of exterior utilities includes actual measured horizontal distances from utilities to permanent facilities/ features. These measurements shall be within an accuracy range of 150 mm and shall be shown at sufficient points to permit easy location of utilities for future maintenance purposes. Measurements shall be shown for all change of direction points and all surface or underground components such as valves, manholes, drop inlets, cleanouts, meter, etc. The general depth range of each underground utility line shall be shown (i.e., 900 mm to 1200 mm in depth). The description of exterior utilities includes the actual quantity, size, and material of utility lines.

b. The location and size of all uncharted existing utilities encountered.

c. The location and dimensions of any changes within the building or structure.

d. Correct grade or alinement of roads, structures or utilities if any changes were made from contract drawings.

e. Correct elevations if changes were made in site grading.

f. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

g. The topography and grades of all drainage installed or affected as a part of the project construction.

h. Options

Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the record drawings.

1.6.2.1 Blue Line or Black Line Prints

Blue line or black line prints shall be full size. All blue or black line prints shall exhibit good readable print with clear, sharp, dark lines, and shall not be smeared, faded, double imaged, or have torn or ragged edges.

1.6.2.2 Prefinal Inspection For Each Item of Work

As part of the prefinal inspection for each item of work, the preliminary record drawings will be reviewed. They shall comply with this specification prior to scheduling the final inspection, and/or prior to substantial completion of the item of work.

1.6.2.3 Preliminary Record Drawing Final Submittal

Prior to scheduling the final acceptance inspection of the last or only bid schedule item of work, the preliminary record drawings shall be completed and delivered to the Contracting Officer's Representative for review and acceptance. If upon review, the drawings are found to contain errors and/or omissions, they will be returned to the Contractor for corrections. Failure of the Contractor to make timely delivery of the preliminary record drawings on any or all items of work will be cause for the Government to delay substantial completion and to assess liquidated damages in accordance with the terms and conditions of the contract.

1.6.2.4 Withholding for Preliminary Record Drawings

Failure by the Contractor to maintain current and satisfactory preliminary record drawings in accordance with these requirements will result in withholding from progress payments 10 percent of the progress payment amount until such time as the record drawings are brought into compliance. This withheld amount will be indicated on monthly payment estimates until the Contractor has fulfilled these contract requirements.

1.6.2.5 Final Inspection

For each interim item of work, furnish a copy of the preliminary record drawings for that item, which the Contractor has reproduced from the approved preliminary record drawing reproducibles, to the Contracting Officer's representative at the time of final inspection for that item. At the time of final inspection on the last or only item of work, the Contractor shall deliver a copy of the complete set of the approved preliminary record drawings to the Contracting Officer's Representative.

1.6.3 Final Record Drawings (CADD Record Drawings)

Upon approval of the preliminary record drawings, the Contracting Officer will return the approved preliminary record drawing prints back to the Contractor. The Contractor will then modify the CADD files as may be necessary to correctly show all the features of the project as it was constructed by bringing the contract set into agreement with the preliminary record drawings, including adding additional drawings and CADD files as may be necessary. The Contractor shall furnish the as-built drawings in the same file format as the Working CADD files. The Working CADD files will be furnished to the Contractor. The CADD files are located on the Contract CD-ROM disk in Bentley Systems MicroStation, . The Working CADD files are in Bentley Systems MicroStation format.] These CADD files are part of the permanent records of this project and the Contractor shall be responsible for the protection and safety thereof until final submittal to the Contracting Officer. Drawings, tracings, or CADD files damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at the Contractor's expense. CADD files will be audited by the Contracting Officer and for accuracy and conformance to the above specified drafting and CADD standards.

1.6.3.1 Drafting

Only personnel proficient in the preparation of engineering drawings and CADD shall be employed to modify the original contract drawings, prepare additional new drawings, and modify the CADD files. All modifications and new drawings shall conform to applicable requirements specified in the paragraph "CADD Standards." The Contractor shall ensure that all delivered CADD digital files and data (e.g., sheet files, model files, cell/block libraries) are compatible with the Government's target CADD system and operating system, and adhere to the standards and requirements specified. The term "compatible" means that data is in native digital format i.e., .dgn (MicroStation) or .dwg (AutoCAD). It is the responsibility of the Contractor to ensure this level of compatibility.

1.6.3.2 CADD Standards

CADD Standards are specified in Section 01016 DESIGN DOCUMENT REQUIREMENTS. CADD drawings shall be prepared in accordance with the applicable general and discipline-specific provisions for drawing formats, level/layer assignments, line colors, line weights, and line types of the TSC-01 (Tri-Service A/E/C Standards).

CADD standards are located at the following Web sites:

http://tsc.wes.army.mil/products/standards/aec/aecstdweb.asp

Seed/prototype files, containing the Government's preset standard metric/English settings can be downloaded from the Internet at the following address:

http://tsc.wes.army.mil/products/standards/aec/aecstdweb.asp

Electronic reference files containing the Government's standard border/title block sheets can be downloaded from the Internet at the following address:

http://tsc.wes.army.mil/products/standards/aec/aecstdweb.asp

The Contractor shall submit a written request for approval of any deviations from the Government's established CADD standards. Deviations will not be permitted unless prior written approval of such deviations has been received from the Government.

1.6.3.3 Final Revisions

When final revisions have been completed, place the words "REVISED RECORD DRAWING," in letters at least 5 mm high, and the date of completion in the revision block above the latest existing revision notation on each drawing CADD file.

1.6.3.4 Border Sheets

The border sheet to be used for any new record drawings shall be the same as used on the original drawings.

1.6.3.5 Copies of the Final Record Drawings

Blue line or black line prints shall be full size. All blue or black line

prints shall exhibit good readable print with clear, sharp, dark lines, and shall not be smeared, faded, double imaged, or have torn or ragged edges.

1.6.3.6 Submittal Requirements

The Contractor shall submit to the Contracting Officer the final record drawings, consisting of one set of full size blue line or black line prints, one full size vellum reproducible set, and two sets of corrected CADD files on CD-ROM disks; verification that the CADD files have been loaded and work on the designated computer systems and are error- and virus-free; the approved preliminary blue lines; and all required reproduced items. All paper prints, reproducible drawings, and CADD files will become the property of the Government.

a. Sustainable Project Rating Tool (SPiRiT)

Submit a final update of the Contractor's Proposal's Sustainable Project Rating Tool (SPiRiT) sheets, indicating the achievement of the listed elements and the achievement level of the various goals listed in Volume II DESIGN AND PERFORMANCE REQUIREMENTS, PERFORMANCE REQUIREMENTS Chapter 111 FACILITY PERFORMANCE, paragraph "Environmental Responsible Design." Provide certification of achievement of the specified rating.

1.6.4 Post-Record Drawing Work

In event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the record drawings, the Contractor shall furnish revised and/or additional drawings (hard copy and CADD files), as required to depict as-built conditions. The requirements for these additional drawings, including CADD files, will be the same as for the record drawings included in the original submission.

1.6.5 Payment for Final Record Drawings

The amount listed for Final Record Drawings in the Bidding Schedule will be paid to the Contractor upon the Contracting Officer's acceptance of the completed record drawings.

1.7 ADDITIONAL WARRANTY REQUIREMENTS

The warranty requirements specified in this paragraph are in addition to those specified in the Contract Clause WARRANTY OF CONSTRUCTION in Section 00700 CONTRACT CLAUSES.

1.7.1 Performance Bond

It is understood that the Contractor's Performance Bond will remain effective throughout the life of all warranties and warranty extensions. This paragraph is applicable to the Contractor's Warranty of Construction only and does not apply to manufacturers' warranties on equipment, roofing, and other products.

(a) In the event the Contractor or the Contractor's designated representative fails to commence and diligently pursue any work required under the Warranty of Construction Paragraph within a reasonable time after receipt of written notification pursuant to the requirements thereof, the Contracting Officer shall have a right to demand that said work be performed under the Performance Bond by making written notice on the surety. If the surety fails or refuses to perform the obligation it

assumed under the Performance Bond, the Contracting Officer shall have the work performed by others, and after completion of the work, shall make demand for reimbursement of any or all expenses incurred by the Government while performing the work, including, but not limited to administrative expenses.

(b) Warranty repair work which arises to threaten the health or safety of personnel, the physical safety of property or equipment, or which impairs operations, habitability of living spaces, etc., will be handled by the Contractor on an immediate basis as directed verbally by the Contracting Officer or the Contracting Officer's authorized representative. Written verification will follow verbal instructions. Failure of the Contractor to respond as verbally directed will be cause for the Contracting Officer or the Contracting Officer's authorized representative to have the warranty repair work performed by others and to proceed against the Contractor as outlined in the paragraph (a) above.

1.7.2 Pre-Warranty Conference

Prior to contract completion and at a time designated by the Contracting Officer or Contracting Officer's authorized representative, the Contractor shall meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of Contract Clause WARRANTY OF CONSTRUCTION. Communication procedures for Contractor notification of warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer or Contracting Officer's authorized representative for the execution of the construction warranty shall be established/reviewed at this meeting.

In connection with these requirements and at the time of the Contractor's quality control completion inspection, the Contractor will furnish the name, telephone number and address of a licensed and bonded company which is authorized to initiate and pursue warranty work action on behalf of the Contractor. This single point of contact will be located within the local service area of the warrantied construction, will be continuously available, and will be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of Contractor's responsibilities in connection with Contract Clause WARRANTY OF CONSTRUCTION.

1.7.3 Equipment Warranty Identification Tags

The Contractor shall provide warranty identification tags on all equipment installed under this contract. Tags and installation shall be in accordance with the requirements of Paragraph: EQUIPMENT WARRANTY IDENTIFICATION TAGS.

1.7.4 Contractor's Response to Construction Warranty Service Requirements

Following oral or written notification by the Contracting Officer, the Contractor shall respond to construction warranty service requirements in accordance with the "Construction Warranty Service Priority List" and the three categories of priorities listed below. The Contractor shall submit a report on any warranty item that has been repaired during the warranty period. The report shall include the cause of the problem, date reported, corrective action taken, and when the repair was completed. **If the Contractor does not perform the construction warranty within the timeframes specified, the Government will perform the work and backcharge the**

construction warranty payment item established. (AM#1)

a. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.

b. Second Priority Code 2. Perform onsite inspection to evaluate situation, and determine course of action within 8 hours, initiate work within 24 hours and work continuously to completion or relief.

c. Third Priority Code 3. All other work to be initiated within 3 work days and work continuously to completion or relief.

d. The "Construction Warranty Service Priority List" is as follows:

Code 1-Air Conditioning Systems
(1) Recreational support.
(2) Air conditioning leak in part of building, if causing damage.
(3) Air conditioning system not cooling properly.

Code 1-Doors
(1) Overhead doors not operational, causing a security, fire, or safety problem.
(2) Interior, exterior personnel doors or hardware, not functioning properly, causing a security, fire, or safety problem.

Code 3-Doors
(1) Overhead doors not operational.
(2) Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical
(1) Power failure (entire area or any building operational after 1600 hours).
(2) Security lights
(3) Smoke detectors

Code 2-Electrical
(1) Power failure (no power to a room or part of building).
(2) Receptacle and lights (in a room or part of building).

Code 3-Electrical
Street lights.

Code 1-Gas
(1) Leaks and breaks.
(2) No gas to family housing unit or cantonment area.

Code 1-Heat
(1). Area power failure affecting heat.
(2). Heater in unit not working.

Code 2-Kitchen Equipment
(1) Dishwasher not operating properly.
(2) All other equipment hampering preparation of a meal.

Code 1-Plumbing
(1) Hot water heater failure.
(2) Leaking water supply pipes.

Code 2-Plumbing
(1) Flush valves not operating properly.
(2) Fixture drain, supply line to commode, or any water pipe leaking.
(3) Commode leaking at base.

Code 3 -Plumbing
Leaky faucets.

Code 3-Interior
(1) Floors damaged.
(2) Paint chipping or peeling.
(3) Casework.

Code 1-Roof Leaks
Temporary repairs will be made where major damage to property is occurring.

Code 2-Roof Leaks
Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 2-Water (Exterior)
No water to facility.

Code 2-Water (Hot)
No hot water in portion of building listed.

Code 3-All other work not listed above.

1.8 EQUIPMENT WARRANTY IDENTIFICATION TAGS

1.8.1 General Requirements

The Contractor shall provide warranty identification tags on all Contractor and Government furnished equipment which he has installed.

1.8.1.1 Tag Description and Installation

The tags shall be similar in format and size to the exhibits provided by this specification, they shall be suitable for interior and exterior locations, resistant to solvents, abrasion, and to fading caused by sunlight, precipitation, etc. These tags shall have a permanent pressure-sensitive adhesive back, and they shall be installed in a position that is easily (or most easily) noticeable. Contractor furnished equipment that has differing warranties on its components will have each component tagged.

1.8.1.2 Sample Tags

Sample tags shall be submitted to the Contracting Officer's Authorized Representative for review and approval. These tags shall be filled out representative of how the Contractor will complete all other tags.

1.8.1.3 Tags for Warranted Equipment

The tag for this equipment shall be similar to the following. Exact format and size will be as approved by the Contracting Officer's Authorized

Representative. The Contractor warranty expires (warranty expiration date) and the final manufacturer's warranty expiration dates will be determined as specified by the Paragraph "WARRANTY OF CONSTRUCTION."

EQUIPMENT WARRANTY CONTRACTOR FURNISHED EQUIPMENT
MFG_____ MODEL NO._____
SERIAL NO._____
CONTRACT NO._____
CONTRACTOR NAME_____
CONTRACTOR WARRANTY EXPIRES_____
MFG WARRANTY(IES) EXPIRE_____

EQUIPMENT WARRANTY GOVERNMENT FURNISHED EQUIPMENT
MFG_____ MODEL NO._____
SERIAL NO._____
CONTRACT NO._____
DATE EQUIP PLACED IN SERVICE_____
MFG WARRANTY(IES) EXPIRE_____

1.8.1.4 Duplicate Information

If the manufacturer's name (MFG), model number and serial number are on the manufacturer's equipment data plate and this data plate is easily found and fully legible, this information need not be duplicated on the equipment warranty tag.

1.8.2 Execution

The Contractor will complete the required information on each tag and install these tags on the equipment by the time of and as a condition of final acceptance of the equipment. The Contractor will schedule this activity in the Contractor progress reporting system. The final acceptance inspection is scheduled based upon notice from the Contractor, thus if the Contractor is at fault in this inspection being delayed, the Contractor will, at the Contractor's own expense, update the in-service and warranty expiration dates on these tags.

1.8.3 Payment

The work outlined above is a subsidiary portion of the contract work, and has a value to the Government approximating 5% of the value of the Contractor furnished equipment. The Contractor will assign up to that amount, as approved by the Contracting Officer's Authorized Representative.

1.8.4 Equipment Warranty Tag Replacement

Under the terms of this contract, the Contractor's warranty with respect to work repaired or replaced shall run for one year from the date of repair or replacement. Such activity shall include an updated warranty identification tag on the repaired or replaced equipment. The tag shall be furnished and installed by the Contractor, and shall be identical to the original tag, except that the Contractor's warranty expiration date will be one year from the date of acceptance of the repair or replacement.

1.9 INVENTORY OF CONTRACTOR FURNISHED AND INSTALLED EQUIPMENT

The Contractor shall develop and maintain an up-to-date list of all equipment installed under this contract. The list shall include but not be limited to equipment that require electrical power or fuel, or may require removal or replacement such as AHUs, fans, air conditioners, compressors, condensers, boiler, thermal exchangers, pumps, cooling towers, tanks, fire hydrants, sinks, water closets, lavatories, urinals, shower stalls, and any other large plumbing fixtures, light fixtures, etc. The list shall be reviewed periodically by the Government to insure completeness and accuracy. Partial payment will be withheld for equipment not incorporated in the list. Final list shall be turned over to the Authorized Representative of the Contracting Officer at the time of contractor's quality control completion inspection.

1.9.1 Equipment Identification Number

There are two separate Equipment ID numbering systems. One is for Real Property installed equipment. The other is for Equipment in Place. Only spaces filled with significant digits will be used. Do not add zeros or blanks to fill extra spaces.

a. Real Property Installed Equipment (RFIE)

The equipment ID Number, for use with RPIE, is made of 4 parts. These parts represent the building number, the equipment type suffix, the floor the equipment is located on, and the sequence number of that type of equipment on that floor in the building.

(1) The first part is the building number.

(2) The second part, the equipment type suffix, is a 1 digit alpha-character based on IFS-M. Acceptable codes are:

(a) A - Air Conditioning Plant: Includes chillers, condensing units, etc., excludes air conditioning plants that directly support user end item equipment, such as a separate package unit to chill a computer room equipment space. Excludes window air conditioning units.

(b) B - Compressed Air/Vacuum: Note, only those that are part of the building systems such as pneumatic controls for Energy Management and Control Systems (EMCS). Does not include compressed air and vacuum systems that directly support user end items.

(c) C - Evaporative cooling and mechanical equipment.

(d) D - Dehumidification Equipment: Applies to equipment whose sole purpose is dehumidification of facilities. Excludes dehumidification that directly support user and item equipment.

(e) E - Electrical Generating Plants: Includes permanently installed generators and switch gear associated with prime power and emergency generator plants. Excludes uninterruptable power systems (UPS) equipment.

(f) F - Transformers: Does not include transformers that directly support user end items or equipment.

(g) G - Other Heating Support: Includes air handlers, circulating pumps, etc., associated with heating systems. Also includes dual (heating/cooling) air handlers, etc. Includes specialized central energy management systems EMCS, exclusive of CPU's and peripherals.

(h) H - Heating Plants: Limited to direct fired, fuel burning heating plants. Does not apply to electrical fired heaters, heat pumps, or associated equipment. See Suffixes A, G, or M.

(i) I - Substation and Switching Station: Associates with stepdown from incoming primary voltage to secondary voltage or lower voltage primary voltage.

(j) J - Sewage Pumping Plants: Includes grinder pump type sewage lift systems as well as conventional sewage lift stations, associated controls and equipment.

(k) M - Miscellaneous Utilities: Includes gas generators, cooling towers and other facility systems not otherwise identified. Excludes systems associates with and in support of user end items.

(l) N - Liquid Fuel Dispensing: Includes pumps, controls.

(m) P - Cold Storage and Refrigeration Plants: Excludes portable and prefabricated refrigeration systems which can be removed from the facility.

(n) R - Fire Extinguishing Systems: Includes standpipe and sprinkler systems, as well as fixed gas and/or chemical extinguishing systems intended for protection of the facility. Excludes portable extinguishing systems and fixed gas and/or chemical extinguishing systems intended for protection of user and item equipment. Includes specialized systems such as Engineer Smoke Control systems (ESCS) other than CPU's and associated peripherals of such systems.

(o) S - Water Pumping Plants: Applies to potable and nonpotable water pumping systems only. Excludes storm waste pumping systems which should be includes under Equipment Suffix M.

(p) T - Fire and other Alarm Systems: Excludes security alarm systems and alarm systems associated with user and item equipment such as medical refrigerators and commissary display cases. Does not include 'pumpout' and 'overflow' alarms associates with water and sewage lift stations and other similar facilities.

(q) W - Water Sources: Includes potable and non-potable well equipment and storage tanks.

(r) X - Water Treatment and Filtration Plants: Includes water softeners and deionization equipment in support of facility systems, as well as systems for processing raw water to potability standards. Excludes

systems that directly support user and item equipment.

(s) Y - Industrial Waste and Sewage Treatment Plants: Includes grease, oil, and other waste separators.

(t) Z - Special Purpose: Assigned by installation a case by case basis.

(3) The third part, the floor, is a 1 to 2 alphanumeric character. The system for defining floor number is:

(a) Floors, above and including the ground floor, are numbered in ascending order with the ground floor being equal to 1.

(b) Interstitial floors and spaces are identified by the letter 'I' and the number of the occupied floor below the interstitial space. For example, the interstitial space above the third floor of a building would be identified as: I3. Attic spaces are numbered as interstitial space.

(c) Crawl space, below the first floor, is identified as: CS.

(d) Basements and lower level floors are numbered, in descending order, with a 2 character identified. The first character is the letter 'L' and the second character is the number of the floor with the floor immediately under the ground floor being: L1.

(e) Where equipment, associates with a facility is mounted on the ground outside the physical perimeter of the facility, such as a condensing unit, the floor is identified a: G.

(4) The fourth part, the sequence number, is a 2 to 4 digit character. The first digit shall always be a slash (/). The second through fourth character is the sequential numbering (1 thru 999) of items of equipment with identical first 3 parts of the equipment ID number. For existing facilities, this will normally be given to the activity installing the equipment by the O&M Division. For new facilities, this is assigned by the activity installing the equipment.

b. For "Equipment In Place" Equipment

The equipment ID number, for use with equipment in place (i.e., end item equipment which is not an integral part of the building but which is installed in the building under this contract,) is made of 2 parts. These parts represent the Department of Defense Activity Code (DODAC) of the unit or equipment in the activity.

(1) The first part, the DODAC, is a 6 digit alpha-numeric character representing the primary user or responsible organization. It will be provided to the contractor upon request from the Contracting Officer.

(2) The second part, the sequence number, is a 1 to 4 digit character. It is the sequential numbering (1 thru 9999), of equipment in that building, belonging to the DODAC. Questions, with respect to sequence numbers, should be addressed to the O&M Division.

1.9.2 Equipment Data

List shall include on each item as applicable: Description, Manufacturer, Model or Catalog No., Serial No., Input (power voltage, BTU, etc.), Output (power, voltage, BTU, tons, etc.). Size or Capacity (tanks), and net inventory costs; any other data necessary to describe item and shall list all warrantors and warranty periods for each item of equipment.

1.10 REAL PROPERTY MAINTENANCE RECORDS

Prepare DD Form 1354, TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY, so that the bases can update their real property maintenance records, in accordance with the applicable bases' DPW or Base Civil Engineers' (BCE) office. This form shall contain as many of the resource code items with cost and quantity data as can be developed from the task order final documents. Obtain a general list of resource codes with cost and quantity data from the applicable bases' DPW or BCE office. This form and a sample of a completed form are attached to the end of this Section. An electronic file of the form, DD1354.frl, for use with Delrina Perform Pro Form Filler, version 16 Jul 1992, and a copy of a completed DD Form 1354 are located on the Solicitation and Contract CD-ROM disks. Contractor shall prepare the DD1354 using Delrina Perform Pro Form Filler. Contractor shall obtain DPW or BCE approval of a Draft DD1354 not less than 30 days prior to anticipated Task Order completion date. The Final DD 1354 shall be provided at the Final Inspection for Corps of Engineers and DPW or BCE signature.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

ATTACHMENT 14

COMPOSITE SOIL SAMPLE ANALYSIS RESULT

(Ref. Section 01001-85, para. 14-12 Fuel Contaminated Area)

(perimeter of demolished Bldg 1198 Shop/Hangar)
by ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road, Memphis, TN 38111
phone: 901-327-2750

FLD_SAMP	Fort_Worth	LAB_SAMP	SAMP_DAT	MATRIX	METHOD_	ANALYTE	CAS_NUM	RESULT	QUALIFIER	UNITS	REC_DATE	PREP_DAT	ANAL_DAT	RECOVER	SAMP_TYP	DIL_FACT	REP_LIMIT	BATCH_ID
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Fluoroph	367-12-4			%REC	3/6/2002	3/13/2002	3/19/2002	51	N	1	0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Isophorone	78-59-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Methylna	91-57-6	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Methylph	95-48-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	3&4-Methy	108-39-4	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Naphthaler	91-20-3	67.0	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Nitroanili	88-74-4	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	3-Nitroanili	99-09-2	330	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	330	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Nitroanili	100-01-6	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Nitrobenze	98-95-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Hexachlorc	77-47-4	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	1005	>C12 to C2	PHCD	20.0	U	mg/Kg	3/6/2002	3/14/2002	3/20/2002	0:00	N	1	20.0	V1TXTPH85
Composite	S02014-1	020318401	3/6/2002	SOIL	1005	Total C6 to	PHC	20.0	U	mg/Kg	3/6/2002	3/14/2002	3/20/2002	0:00	N	1	20.0	V1TXTPH85
Composite	S02014-1	020318401	3/6/2002	SOIL	1005	OTP	84-15-1			%REC	3/6/2002	3/14/2002	3/20/2002	94	N	1	0	V1TXTPH85
Composite	S02014-1	020318401	3/6/2002	SOIL	1005	C6 to C12	PHCG	20.0	U	mg/Kg	3/6/2002	3/14/2002	3/20/2002	0:00	N	1	20.0	V1TXTPH85
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Arsenic	7440-38-2	6.32		mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	0.500	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Lead	7439-92-1	55.7		mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	0.400	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Chromium	7440-47-3	19.8		mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	0.500	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Barium	7440-39-3	145		mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	2.00	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Selenium	7782-49-2	0.500	U	mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	0.500	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Silver	7440-22-4	0.500	U	mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	0.500	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW6010B	Cadmium	7440-43-9	0.215		mg/Kg	3/6/2002	3/13/2002	3/14/2002	0:00	N	1	0.100	V16-SO-03
Composite	S02014-1	020318401	3/6/2002	SOIL	SW7471A	Mercury	7439-97-6	0.055		mg/Kg	3/6/2002	3/12/2002	3/12/2002	0:00	N	1	0.020	V8-SO-42
Composite	S02014-1	020318401	3/6/2002	SOIL	E160.3	Percent So	10-02-6	82		%	3/6/2002	3/8/2002	3/8/2002	0:00	N	1	0	PS030801
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	3,3'-Dichlo	91-94-1	330	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	330	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Chloro-3-	59-50-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Chlorona	91-58-7	67.0	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Chloroph	95-57-8	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Chloroph	7005-72-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Chrysene	218-01-9	1,020		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Dibenzo(a,	53-70-3	187		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Dibenzofur	132-64-9	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	1,2-Dichlor	95-50-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	1,3-Dichlor	541-73-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Chloroan	106-47-8	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Di-n-butyl p	84-74-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Bromoph	101-55-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4-Dichlor	120-83-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,6-Dichlor	87-65-0	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Diethyl phtl	84-66-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	3,3'-Dimeth	119-93-7	330	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	330	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4-Dimeth	105-67-9	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	1,4-Dichlor	106-46-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzo(a)py	50-32-8	762		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Acenaphth	83-32-9	67.0	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Acenaphth	208-96-8	67.0	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Acetophen	98-86-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Aniline	62-53-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Anthracene	120-12-7	34.4	J	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzidine	92-87-5	670	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	670	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzo(a)ar	56-55-3	1,020		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032

Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzo(b)flu	205-99-2	1,230		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Carbazole	86-74-8	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzo(g,h,	191-24-2	598		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4,6-Dinitro-	534-52-1	330	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	330	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzoic Ac	65-85-0	1670	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	1670	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzyl Alc	100-51-6	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Bis(2-chlor	111-44-4	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Bis(2-chlor	111-91-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Bis(2-chlor	108-60-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Bis(2-ethyll	117-81-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4-Dinitro	51-28-5	660	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	660	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Butyl benz	85-68-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Benzo(k)flu	207-08-9	772		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	1,2,4,5-Tet	95-94-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Dimethyl pl	131-11-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	N-Nitroso-c	55-18-5	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	N-Nitrosodi	62-75-9	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	N-Nitrosodi	86-30-6	330	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	330	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	N-Nitroso-c	621-64-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Pentachlor	87-86-5	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Phenanthre	85-01-8	97.3		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Phenol	108-95-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Nitrophe	100-02-7	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Pyridine	110-86-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Nitrophe	88-75-5	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,3,4,6-Tet	58-90-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	1,2,4-Trich	120-82-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4,5-Trich	95-95-4	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4,6-Trich	88-06-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Nitrobenze	4165-60-0			%REC	3/6/2002	3/13/2002	3/19/2002	58	N	1	0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2-Fluorobip	321-60-8			%REC	3/6/2002	3/13/2002	3/19/2002	72	N	1	0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	4-Terphen	1718-51-0		a	%REC	3/6/2002	3/13/2002	3/19/2002	137	N	1	0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Phenol-d6	13127-88-3			%REC	3/6/2002	3/13/2002	3/19/2002	59	N	1	0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4,6-Tribr	118-79-6			%REC	3/6/2002	3/13/2002	3/19/2002	67	N	1	0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Pyrene	129-00-0	536		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Indeno(1,2	193-39-5	498		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,4-Dinitrot	121-14-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	2,6-Dinitrot	606-20-2	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Di-n-octyl p	117-84-0	330	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	330	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Diphenylan	122-39-4	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Fluoranthe	206-44-0	553		ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Fluorene	86-73-7	67.0	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	67.0	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Hexachlorc	118-74-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Hexachlorc	87-68-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	N-Nitroso-c	924-16-3	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032
Composite	S02014-1	020318401	3/6/2002	SOIL	SW8270C	Hexachlorc	67-72-1	170	U	ug/Kg	3/6/2002	3/13/2002	3/19/2002	0:00	N	1	170	S01032